ABSTRACT

Original-quality MPEG coded video is processed to produce reduced-quality
MPEG coded video at a reduced bit rate. The processing is based on a scale factor
between average frame size of the original-quality MPEG coded video and a desired
average frame size of the reduced-quality MPEG coded video. For each Discrete Cosine
Transform (DCT) block of each frame, the processing calculates a size of the block of the
reduced frame by scaling the original block size by the scale factor, and removes a
sufficient number of bits from the original block to obtain substantially the calculated
size. In addition, the processing accumulates excess bits when the block size reduction
eliminates more bits from a block than are necessary for the desired reduction of the size
of the block, and any excess bits are used for processing a number of following blocks.